

May 17-18, 2016

NIEHS Building 101, Rodbell Auditorium • Research Triangle Park, N.C.

AGENDA

Tuesday, May 17, 2016

- 8:00 a.m. Registration
- 8:30 a.m. **Welcome**
Linda Birnbaum, Director, National Institute of Environmental Health Sciences (NIEHS)
- 8:40 a.m. **NIEHS 101: Introduction to the National Institute of Environmental Health Sciences**
Gwen Collman, Director, Division of Extramural Research and Training, NIEHS
- 9:00 a.m. **SESSION ONE: Moderator, Fred Tyson**, Genes, Environment, and Health Branch, NIEHS
- 9:05 a.m. **Genetic and Developmental Susceptibility to Mitochondrial Toxicity**
Joel Meyer, Duke University
- 9:25 a.m. **Role of DNA Methyltransferases in Toxicant-induced Alterations in DNA Methylation**
Neelakanteswar Aluru, Woods Hole Oceanographic Institution
- 9:40 a.m. **Protecting Children Around the Globe From the Harms of Toxic Metals**
Rebecca Fry, University of North Carolina at Chapel Hill
- 10:00 a.m. **The Impact of Arsenic on the Gut Microbiome: From 16S Sequencing to Functional Characterization**
Kun Lu, University of Georgia
- 10:15 a.m. Break
- 10:45 a.m. **Pathogenic Alterations of Manganese Neurobiology and Neurotoxicity in Huntington's Disease**
Aaron Bowman, Vanderbilt University
- 11:05 a.m. **The Mechanism Underlying Epigenetic Effects of Exposure to Hydrogen Sulfide**
Dana Miller, University of Washington
- 11:25 a.m. Discussion
- 11:45 a.m. Lunch (Executive Conference Room)
- 1:00 p.m. **SESSION TWO: Moderator, Janice Allen**, Scientific Review Branch, NIEHS
- 1:05 p.m. **Role of Autophagy Pathways in UVA-induced Skin Cancer**
Yu-Ying He, University of Chicago
- 1:25 p.m. **The Role of Nrf2 in Bisphenol-induced NAFLD**
Angela Slitt, University of Rhode Island
- 1:45 p.m. **The Role of Nrf2 in Immune Cell Polarization and Allergy**
Cheryl Rockwell, Michigan State University
- 2:00 p.m. **A Flame Retardant Story: Bridging Science With Policy**
Heather Stapleton, Duke University
- 2:20 p.m. Discussion
- 2:40 p.m. Break



- 2:55 p.m. **SESSION THREE: Moderator, Patrick Mastin**, Deputy Director, Division of Extramural Research and Training, NIEHS
- 3:00 p.m. **Investigating Aryl Hydrocarbon Receptor-Cofactor Interactions That Mediate Toxicity**
Daniel Gorelick, University of Alabama at Birmingham
- 3:15 p.m. **Pattern Recognition Receptors Mediate the Lung Injury-Bone Loss Inflammatory Axis to Organic Dust Exposure(s)**
Jill Poole, University of Nebraska Medical Center
- 3:30 p.m. **Role of Bio-coronas in the Enzymatic Oxidation of Single-walled Carbon Nanotubes**
Alexander Star, University of Pittsburgh
- 3:50 p.m. **Integrative Nanotoxicology: Linking Rapid Assays and Informatics to Understand Nanomaterial-Biological Interactions**
Stacey Harper, Oregon State University
- 4:10 p.m. **Maternal Nanomaterial Inhalation During Gestation: Fetal Microvascular Consequences and Transcriptomic Dysregulations**
Timothy Nurkiewicz, West Virginia University School of Medicine
- 4:30 p.m. Discussion
- 5:00 p.m. Adjourn

Wednesday, May 18, 2016

- 8:00 a.m. Registration
- 8:30 a.m. **SESSION FOUR: Moderator, Janice Allen**, Scientific Review Branch, NIEHS
- 8:35 a.m. **Developmental Exposure to DDT Impairs Energy Expenditure Leading to Insulin Resistance**
Michele La Merrill, University of California, Davis
- 8:50 a.m. **Periconceptional Biomonitoring**
Christina Porucznik, University of Utah School of Medicine
- 9:10 a.m. **Utilizing Mouse Genetic Diversity to Identify Mechanisms of Environmentally-induced Airway Disease**
Samir Kelada, University of North Carolina at Chapel Hill
- 9:25 a.m. Discussion
- 9:45 a.m. Break
- 10:05 a.m. **SESSION FIVE: Moderator, Jonathan Hollander**, Genes, Environment, and Health Branch, NIEHS
- 10:10 a.m. **Does Arsenic Increase Risk of Neural Tube Defects Among a Highly Exposed Population**
Maitreyi Mazumdar, Harvard Medical School
- 10:25 a.m. **Neurotoxicity of Airborne Particles in the Setting of Stroke and Cerebral Hypoperfusion**
William Mack, University of Southern California
- 10:40 a.m. **Hereditary Parkinsonism Due to Loss of Function Mutations in a Manganese Efflux Transporter**
Somshuvra Mukhopadhyay, University of Texas at Austin
- 10:55 a.m. **Exposure to Welding Fumes in a Local Cohort: A Longitudinal Neuroimaging Study**
Ulrike Dydak, Purdue University
- 11:15 a.m. **Developmental Pesticide Exposure Causes Long-term Decreases in Sodium Channels and Glutamate Release in the Hippocampus**
Jason Richardson, Northeast Ohio Medical University
- 11:35 a.m. Discussion
- 12:05 p.m. **Closing Remarks, Carol Shreffler**, Exposure, Response, and Technology Branch, NIEHS
- 12:15 p.m. Adjourn